

## INFORMATION DISCLOSURE STATEMENT

ATTORNEY  
DOCKET NO:  
022002-03APPL. NO.  
10/717,046APPLICANT  
David Lush et al.FILING DATE  
Nov. 19, 2003GROUP  
3672

## U. S. PATENT DOCUMENTS

*Exam. Initial		DOCUMENT NUMBER								DATE	NAME	CLASS	SUB CLASS	FILING DATE
T	AA	3	2	5	2	4	3	9	05/24/1966	Shatto, Jr. et al.	114	257		
	AB	3	6	0	2	7	0	1	08/31/1971	Boyd, Jr.	700	36		
	AC	3	6	0	8	6	3	0	09/28/1971	Wooden et al.	166	357		
	AD	3	6	4	3	7	3	6	02/22/1972	Talley, Jr.	166	356		
	AE	4	0	4	6	1	9	1	09/06/1977	Neath	166	352		
	AF	4	1	4	9	6	0	3	04/17/1979	Arnold	175	7		
	AG	4	2	9	1	7	7	2	09/29/1981	Beynet	175	5		
	AH	4	5	2	7	6	3	2	07/09/1985	Chaudot	166	357		
	AI	4	5	7	7	7	0	0	03/25/1986	Dellinger et al.	175	40		
	AJ	4	6	5	1	8	3	6	03/24/1987	Richards	175	62		
	AK	4	8	4	8	4	7	5	07/18/1989	Dean et al.	166	357		

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER		PUBLICATION DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION
P	AL	2 2 6 0 0 8 7	04/07/1993	UK				

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

AM	Strand, B. and Bakke, W., "Subsea Separation on the Troll Field," <u>Scandinavian Oil-Gas Magazine</u> , July 8, 1998, pp. 122-124.
AN	Baggs, C., Kent, I., and Allen, John, "Troll Pilot Control System: Advanced Control System for a Subsea Separator," Offshore Technology Conference (OTC) 12154, May 1-4, 2000, pp 1-10.
AO	Arnold, K.E. and Ferguson, P.L., "Tomorrow's Compact Separation Train," <u>Hart's E&amp;P</u> , December 1999, pp. 80-82.
AP	Fjøsne, E., "Subsea Processing – Maximising Value in Areas With Existing Infrastructure," Offshore Technology Conference (OTC) 14008, May 6-9, 2002, pp. 1-5.
AQ	Eriksen, S., "How Can Subsea Processing Remove Topside Processing Constraints," FMC Energy Systems, FMC Kongsberg Subsea, August 30, 2001, 11 pages.
AR	Davalath, J. "Economic Benefits of Compact Subsea Separation System," FMC Energy Systems, Deep Offshore Technology 1999, 14 pages.

Examiner:

D. MULR

Date Considered

9/24/04

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.

<b>INFORMATION DISCLOSURE STATEMENT</b>											ATTORNEY DOCKET NO: 022002-03	APPL. NO. 10/717,046			
											APPLICANT David Lush et al.				
											FILING DATE Nov. 18, 2003	GROUP 3672			
<b>U. S. PATENT DOCUMENTS</b>															
*Exam. Initial		DOCUMENT NUMBER								DATE	NAME	CLASS	SUB CLASS	FILING DATE	
(1)	BA	4	9	0	0	4	3	3	02/13/1990	Dean et al.	210	170			
	BB	4	9	8	2	7	9	4	01/08/1991	Houot	166	357			
	BC	5	1	2	9	9	3	1	07/14/1992	Oranje	55	399			
	BD	5	1	5	4	7	4	1	10/13/1992	da Costa Filho	96	157			
	BE	5	4	8	8	9	9	3	02/06/1996	Hershberger	166	372			
	BF	5	7	0	7	4	2	7	01/13/1998	Stockman et al	95	260			
	BG	5	7	2	2	4	9	4	03/03/1998	Landeck et al.	175	7			
	BH	6	0	0	4	3	8	5	12/21/1999	Birmingham	96	174			
	BI	6	0	6	2	3	1	3	05/16/2000	Moore	166	357			
	BJ	6	0	6	8	0	5	3	05/30/2000	Shaw	166	267			
(1)	BK	6	2	1	6	7	8	1	04/17/2001	Knight	166	105.5			
<b>FOREIGN PATENT DOCUMENTS</b>															
		DOCUMENT NUMBER								PUBLICATION DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
														Yes	No
	BL														
<b>OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)</b>															
(1)	BM		Songhurst, B.W. and Eyre, G.P., "Experience Gained From the First U.K. Subsea Separator," Offshore Technology Conference (OTC) 6423, May 7-10, 1990, pp. 43-50.												
	BN		Smith, J.R., "The Highlander Field: Eight Years On," Offshore Technology Conference (OTC) 7438, May 2-5, 1994, pp. 177-187.												
	BO		Crook, J. "Seabed Separation First for Troll," Petroleum Review, March 1999, pp. 31-32.												
	BP		"SUBSIS: Subsea Separation and Injection System," ABB Offshore Systems, ABB Oil, Gas & Petrochemicals, (undated), 4 pages.												
	BQ		"Subsea Separation and Injection by ABB's SUBSIS," ABB Offshore Systems, <a href="http://www.abb.com/oilandgas">www.abb.com/oilandgas</a> , August 1999, 3 pages.												
(1)	BR		Davalath, J., Wessel, J., and Hatlo, A., "State of the Art in Subsea Pumping Technology," FMC Energy Systems, November 7-9, 2000, 11 pages.												
Examiner:	<i>John Fauk</i>		Date Considered		<i>9/20/05</i>										
*EXAMINER if citation considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.															

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<b>U. S. PATENT DOCUMENTS</b>														
*Exam. Initial		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE	
(11)	CA	6	2	7	6	4	5	5	08/21/2001	Gonzalez	166	357		
<b>FOREIGN PATENT DOCUMENTS</b>														
		DOCUMENT NUMBER							PUBLICATION DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
	CB												Yes	No
<b>OTHER DISCLOSURES</b> (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)														
(11)	CC		"Helico-Axial Multiphase Pump, Deepwater Technology," Multiphase, Guinard Pumps, Textron Fluid Handling Products, May 1989, 12 pages.											
	CD		Technical Bulletin, "Increased Oil Production by Means of Subsea Processing," Framo Engineering AS, Bergen, Norway, January 1999, 4 pages.											
	CE		Technical Bulletin, "Boosting - Increased Oil Production and Recovering Utilizing: Multiphase Pumps, Subsea Separator - SWAG," Framo Engineering AS, Bergen, Norway, November 1999, 4 pages.											
	CF		Technical Bulletin, "Subsea Multiphase Pumps for Shell, Draugen," Framo Engineering AS, Bergen, Norway, May 1999, 4 pages.											
	CG		Technical Bulletin, "Framo Subsea Multiphase Booster Pumps for BP ETAP," Framo Engineering AS, Bergen, Norway, April 1999, 4 pages.											
	CH		"Subsea Multiphase Pump," Kvaerner Eureka a.s., Lier, Norway, (undated), 6 pages.											
	CI		Technical Bulletin, "Increased Oil Production by Means of Subsea Multiphase Boosting," Framo Engineering AS, Bergen, Norway, November 1999, 4 pages.											
	CJ		Rekve, S., "Fourth-Quarter Seafloor Pump Demo Set," Hart's E&P 5 <sup>th</sup> Deepwater Technology (undated), p. 31.											
	CK		"Multiphase Booster Pumps Provide Efficient Production Tool," Hart's E&P 5 <sup>th</sup> Deepwater Technology, (undated), p. 32.											
	CL		Bradbury, J., "Pumping Up the Volume," Hart's E&P, October 2001, p. 29.											
	CM		"Hydraulic Turbine Drive Submersible Centrifugal Pumps," Weir Pumps, November 2001, pp. 1-2.											
(11)	CN		Harden, W.G. and Downie, A.A., "Field Trial and Subsequent Large-Scale Deployment of a Novel Multiphase Hydraulic Submersible Pump in Texaco's Catain Field," Offshore Technology Conference (OTC) 13197, April 30-May 3, 2001, pp. 1-19.											
Examiner:	<i>Mark G. Lush</i>		Date Considered		<i>9/24/01</i>									
*EXAMINER if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and <u>not</u> considered. Include copy of this form with the next communication to applicant.														